Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Previously Presented) A control circuit for relay-operated gas valves comprising:

a relay for opening and/or closing a gas valve;

a failsafe circuit for the relay, the failsafe circuit including:

a charging circuit having at least one capacitor including a charging capacitor;

a drive circuit coupled to the relay having an input transistor, a base of the input transistor being electrically connected to the charging capacitor of the charging circuit; and

a control device being connectable to an input of the failsafe circuit, the failsafe circuit only supplying the relay with a voltage and/or current necessary for opening the gas valve when an input signal having at least two different frequency signals succeeding each other in time is supplied at the input of the failsafe circuit by the control device;

wherein, upon the application of a first frequency signal at the input of the failsafe circuit, the charging circuit charges the charging capacitor, and upon the application of a second frequency signal at the input of the failsafe circuit, the second frequency signal having a different frequency that the first frequency signal, the charging circuit does not charge the charging capacitor, and the charging capacitor when sufficiently charged, provides a bias to the input transistor of the drive circuit that enables the input transistor of the drive circuit;

wherein the drive circuit, upon the application of the second frequency signal at the input of the failsafe circuit, supplies the relay with a voltage and/or current necessary for opening the gas valve but only if the charging capacitor is sufficiently charged by the first frequency signal to provide the necessary bias to the input transistor of

the drive circuit to enable the input transistor of the drive circuit to pass the second frequency signal.

2. (Canceled)

3. (Previously Presented) The control circuit of claim 1, wherein the charging circuit charges the charging capacitor exclusively upon the application of the first frequency signal at the input of the failsafe circuit.

4. (Previously Presented) The control circuit of claim 1, wherein the charging circuit, upon the application of a second frequency signal at the input of the failsafe circuit, does not charge the charging capacitor of the charging circuit.

5. – 7. (Canceled)

8. (Previously Presented) The control circuit of claim 1, wherein the input transistor of the drive circuit has a collector terminal, an emitter terminal and a base terminal, the collector terminal of the input transistor is connected via an interposed resistor to a supply voltage, and the emitter terminal of the input transistor is connected to a ground potential.

9. (Previously Presented) The control circuit of claim 8, wherein the drive circuit further includes a second transistor having a collector terminal, an emitter terminal and a base terminal, the base terminal of the second transistor receives the second frequency that is presented at the input of the failsafe circuit, the collector terminal of the second transistor is connected to the base of the input transistor, and the emitter terminal of the second transistor is connected to a ground potential.

10. (Cancel)

11. (Previously Presented) The control circuit of claim 1, wherein the drive circuit further includes two Darlington transistor circuits connected together at a drive node, a diode connected in parallel to the relay, and a series connected resistor and capacitor connected between the drive node and the relay.

12. (Previously Presented) The control circuit of claim 1, wherein the first frequency signal has a frequency of around 1000 kHz and the second frequency signal has a frequency of around 5 kHz, the two frequency signals being applied at the input of the failsafe circuit succeeding one another in time in such a manner that in each case a time span of around 40 ms with the first frequency signal of around 1000 kHz is followed by a time span of around 80 ms with the second frequency signal of around 5 kHz.

13. (Previously Presented) The control circuit of claim 1, wherein the failsafe circuit only supplies the relay with a voltage and/or current necessary for opening the gas valve if the two different frequency signals are applied succeeding each other in time in accordance with a predetermined definition.

14. (Previously Presented) The control circuit of claim 1, wherein the first frequency signal and the second frequency signal are applied successively at the input of the failsafe circuit in such a way that a first time period with the first frequency signal is respectively followed by a second time period with the second frequency signal.

15. (Previously Presented) A fail-safe circuit for controlling a relay that controls the opening of a gas valve, the fail-safe circuit comprising:
at least one input that can be connected to a gas valve controller;
at least one output that can be connected to the relay;

a charging circuit having a charging capacitor; and

a drive circuit having at least one transistor and a drive capacitor;

wherein the fail-safe circuit is configured to only supply an output signal to the relay to open the gas valve via the at least one output of the fail safe circuit if/when the gas valve controller provides an input signal having at least a first frequency signal and a different second frequency signal to the at least one input of the fail-safe circuit;

wherein, during the period of the first frequency signal, the charging capacitor charges, and the drive capacitor discharges to provide a relay current to the relay; and

further wherein, during the period of the second frequency signal, the charging capacitor discharges into the base of the at least one transistor of the drive circuit, which causes the drive circuit to charge the drive capacitor and to provide a relay current to the relay.

16. (Previously Presented) The fail-safe circuit of claim 15 wherein the fail-safe circuit is configured to only supply the relay current to the relay to open the gas valve via the at least one output of the fail safe circuit when the gas valve controller provides the input signal such that the first frequency signal is coordinated in time with the second frequency signal.

17. (Previously Presented) The fail-safe circuit of claim 15 wherein the fail-safe circuit is configured to only supply the relay current to the relay to open the gas valve via the at least one output of the fail safe circuit if/when the gas valve controller provides an input signal that includes the first frequency signal for a first period of time followed by the second frequency signal for a second period of time.

18. (Previously Presented) The fail-safe circuit of claim 17 wherein the fail-safe circuit is configured to only supply the relay current to the relay to open the gas valve via the at

least one output of the fail safe circuit if/when the first frequency signal is not supplied during the second period of time, and the second frequency signal is not supplied during the first period of time.

19. (Currently Amended) A method for controlling a relay that controls the opening of a gas valve, the method comprising the steps of:

determining if a gas valve controller is currently providing a valid gas valve control signal, wherein the determining step includes determining if the gas valve controller is providing an input signal that includes a first frequency signal for a first period of time followed by a second frequency signal for a second period of time;

charging a charging capacitor of a charging circuit during the first period of time when the input signal includes the first frequency signal;

charging a drive capacitor of a drive circuit during the second period of time when the input signal includes the second frequency signal, wherein a charged voltage across the drive capacitor of the driving circuit provides a current to the relay to maintain the relay in its current state when the charging capacitor of the charging circuit is charging, and wherein a charged voltage across the charging capacitor enables the drive circuit to charge the drive capacitor of the drive circuit during the second period of time;

providing a signal to the relay in accordance with the gas valve control signal if the determining step determines that the gas valve controller is currently providing a valid gas valve control signal; and

closing the gas valve via the relay if the determining step determines that the gas valve controller is not currently providing a valid gas valve control signal.

20-21. (Canceled)